



Determinants of Choice of Delivery Services Among Expectant Mothers in Ankpa Local Government Area of Kogi State, Nigeria

Sherifat, Mabe Danjuma¹, Habib Onuh Ibrahim²

¹Student, Prince Abubakar Audu University, Anyigba, Kogi State Nigeria

²Student, Prince Abubakar Audu University, Anyigba, Kogi State Nigeria

ABSTRACT

Low utilization of health facilities for delivery by pregnant women poses a public health challenge in Nigeria despite the efforts of government and international non-governmental organizations in supporting maternal health services. It is on this note that the study aim to assess the determinants of choice of delivery services among expectant mothers in Ankpa Local Government of Kogi State. The research was guided by four (4) research questions while the survey research design using a cross sectional method was utilized. The study population are women of reproductive age (15-49 years) that use hospitals, prayer houses or local delivery homes in the local government totalling 77,536 from which a sample size of 329 was selected using Crejcie and Morgan table of sampling. A questionnaire titled Determinants of Choice of Delivery Services among Expectant Mothers Questionnaire (DCDSEMQ) and in-depth-interview guide will be used to solicit information from respondents. Data collected shall be subjected to Statistical Package for Social Sciences (SPSS) analysis. Responses from the retrieved questionnaire were coded and analyzed using Statistical Package for Social Sciences (SPSS) version 20. Frequency count and percentage was used to represent the demographic variables.

Keywords: Determinants, expectant mothers, choice, delivery services

Background to the Study

Effective management of the stages of labour throughout pregnancy, as well as any difficulties that may arise, is one of the most critical factors in decreasing maternal fatalities, especially in low-resource settings. Pregnancy and childbirth complications among women are the major causes of maternal death in poor nations (World Health Organisation, WHO 2019). This emphasizes the importance of giving birth in a health facility with the assistance of competent health personnel who can handle complications and make necessary referrals to the next level of care. Increasing the percentage of births that take place in hospitals is an essential method for lowering maternal mortality (Macro, 2013).

Because of the possible risk during pregnancy, maternal fatalities account for up to 211 deaths per 100,000 live births worldwide, with 94 percent of all maternal deaths occurring in low- and middle-income countries (United Nations Children's Fund, UNICEF 2019). Of these countries, sub-Saharan countries have a higher prevalence of pregnancy-related deaths, accounting for 60% of global maternal mortality (World Health Organization, WHO 2016). Nigeria's maternal mortality ratio is estimated to be 560/100,000 women (WHO, 2014), so for every 13 pregnant women in Nigeria, there is a likelihood of having one death, which is about 8% of every pregnancy (UNICEF, 2019). This boil down to the type of delivery service employed by expectant mothers.

Experts have argued that the most important strategy to reduce maternal mortality is the use of Antenatal Care (ANC) and skilled birth attendants in all countries (Odetola, 2015). Prenatal care, care during delivery, and postnatal care are all part of a continuum of care for pregnant women that is guided by a WHO recommended minimum package of care that includes routine and emergency care (United Nations Population Fund, UNFPA 2019). The availability of qualified or skilled attendants and support employees who can use available technology to avoid and manage issues determines whether or not the suggested minimum package is provided (UNFPA, 2019). Moreover, this necessary element of skilled health providers is mainly available in designated health facilities or obstetric centres (Engjom, Morken, Norheim & Klungsoyr, 2014). Pregnant women must have access to care, as evidenced by the actual use of antenatal and, more critically, delivery services, for a country to achieve a reduction in maternal fatalities.

The choice of place of delivery by expectant mothers are being influenced by many factors. A pregnant woman's readiness to give birth in a health facility is an essential element that could influence her choice of delivery location. Anyait and Mukanga (2012) maintain that, for a pregnant woman to utilize health care services, she must have strong motivation to do so. Otherwise, as viewed by Kitui, Lewis and Davey (2009), if she lacks motivation, she will have a skewed choice of health facility delivery. Pregnancy is connected with risk, and all pregnant women in impoverished nations are advised to give birth in a hospital, whereas, in developed countries such as the United Kingdom (UK), policy recommendations on childbirth have focused on the importance of providing choice (Pitchforth, Teijlingen, and Watson, 2009). The United Kingdom National Institute for Health and Care Excellence 2014

guidelines for intrapartum care recommend that women should have a choice when it comes to where they give birth, namely whether they choose to give birth at home, in a midwife-led unit, or in a consultant-led unit.

The intervening variables that influence pregnant mother's choice of place of delivery according to Rahmani and Brekke (2013) include the knowledge of the risk to her life and that of her baby during childbirth, benefits of delivering in a modern health facility, access to a health facility, level of income, her previous experiences, and the sex of baby among others. Aside from these intervening variables, Kibaru, Karanja and Guyo (2006) posited that some women are more inclined to seek medical help only when they are in imminent danger of losing either lives or that of their babies. Other factors that influence expectant mothers' choice of birth location include cultural attitudes and practices. According to Kibaru, et'al (2006) and Ohiemi, (2021), some cultures regard pregnancy as a natural process that does not necessitate medical intervention. He argued that in some communities (Yorubas of Nigeria, Luhyas of Kenya and Xien Khouang Province of Indonesia), any issue with delivery, particularly obstructed labour, is linked to the woman's wickedness. In a similar cultural setting, some people believe that if a woman gives birth in a hospital, she would become barren since the rituals related to the placenta, which is a sacred organ, cannot be conducted there. Such a misconception has the effect of discouraging pregnant women from giving birth in a health facility (ibid).

From the foregoing, it is pertinent to investigate why pregnant women in Ankpa Local Government Area deliver their babies in a place of their choice and what factors influence their choice of place. This study will be carried out to fill a knowledge gap on determinants of the choice of delivery services among expectant mothers in Ankpa Local Government Area of Kogi State.

Objectives of the Study

The general objective of the study is to investigate determinants of choice of delivery services among expectant mothers in Ankpa Local Government Area of Kogi State, Nigeria. Specifically, the study sought to:

- i. Find out the choice of place of delivery services among the expectant mothers in Ankpa Local Government Area of Kogi State.
- ii. Ascertain the determining factors of choice of delivery services among expectant mothers in Ankpa Local Government Area of Kogi State.
- iii. Identify the benefits of choosing the modern health delivery services among expectant mothers in Ankpa Local Government Area of Kogi State.
- iv. Determine the consequences of not choosing modern health delivery services among expectant mothers in Ankpa Local Government Area of Kogi State.

Conceptual Review

Literature on major concepts in this research work shall be discussed in this section. The concepts such as expectant mothers, delivery services, determinants of choice of delivery among expectant mothers, benefits of modern health delivery services and consequences of not using modern health delivery services shall be done.

Expectant mother

An expectant mother is a lady who is pregnant, according to Derek (2000). According to him, pregnancy happens when one spermatozoon fertilizes the egg (or ovum) out of the millions that are deposited in the upper part of the vagina during sexual activity. The fertilized egg then exits the fallopian tube and attaches itself to the walls of the uterus or womb. According to Bonnet and Brown (1999), the stages of pregnancy include ovulation, implantation, fetus growth, and development. They outlined the physiological and psychological changes that occur during pregnancy to boost a woman's body's production of the sex hormones progesterone and estrogen.

In the work of Williams (2007), he stated that morning sickness with accompanying nausea and vomiting might occasionally occur when the body adjusts to the hormonal shifts. He continued by saying that the uterus grew larger and more tender, and the breast grew larger and softer. He claimed that the woman frequently had mood swings, occasionally developed cravings for foods she didn't like, and developed an acute sense of smell. William (2007) noted that as her pregnancy progressed, the swelling of her uterus made it difficult and painful for her to move. Summerbell (1991) pointed out that a woman's nutritional requirements, digestive processes, and portion sizes alter during pregnancy, causing her to eat higher and smaller portions more slowly and frequently.

According to Crowder (1995), a lady who is pregnant is an expectant mother. He asserts that fertilization and implantation of an ovum in a woman's uterus constitute pregnancy. He added that the mother carries the growing kid inside her for around nine months, and that the pregnancy ends when the baby is delivered. Nash (2002) noted that the mother's relationship with her unborn kid is very close. She asserts that "even while the child is still in the womb, its genes engages the environment of the womb in an elaborate conversation, which is a two-way dialogue, involving not only the air the mother breathes and the water she drinks but also what drugs she takes, what diseases she encounters, and what hardships she experiences."

Delivery service

Only good prenatal care (ANC) and a better delivery location choice, as advised by health authorities, can improve the quality of childbirth outcomes (Maureen, Thembelihle, and Thandeka, 2018). In addition, it has been discovered that the place of delivery is one of the main indicators of neonatal mortality (Justice, Honorati, Renay, Shalom and Owusu-Agyei, 2012). In order to protect women's physical and mental welfare, the World Health Organization (WHO) has been advising at least four antenatal care (ANC) visits throughout pregnancy as well as postnatal care at six days, six weeks, and six months after giving birth (WHO, 2016). Because of this, there is a very low likelihood that women who gave birth at home will receive this crucial care (Daniel, Diana and Mark, 2014).

The site of delivery affects a woman's chances of having a healthy baby as well as her and the child's quality of life following delivery. According to research by Darmstadt et al. (2009), women who give birth in health facilities with access to competent birth attendants had better outcomes and a lower risk of maternal and neonatal morbidity and mortality. Sadly, more than 50% of births are said to occur at home in impoverished nations (Campbell, and Graham, 2006). According to Azuh, Azuh, Iweala, Adeloye, Akanbi and Mordi (2017), choosing to give birth outside of a hospital is linked to the majority of maternal and newborn fatalities. If there were more access to trained birth attendants, many of these deaths may be avoided (Gabrysch and Campbell, 2009).

Women in Nigeria (and other developing nations) have the choice of institutional delivery (delivery in a medical facility) or non-institutional delivery (delivery at home, a church, the residence of a traditional birth attendant (TBA), or at temporary private clinics run by untrained or poorly trained individuals) (National Population Commission, 2019). According to several research, non-institutional deliveries are prevalent between 39 and 61 percent of the time (Amorim and Machado 2018). Numerous research have looked into the factors that influence women's decision-making over where to give birth. Poor access to healthcare facilities, the cost of healthcare services, the attitude of healthcare professionals, the women's educational level and her husband's educational level, parity, a lack of privacy, a fear of surgery, cultural practices, rural living, and low economic status are all factors that contribute to home births among women in sub-Saharan Africa.

Determinants of Choice of Delivery among Expectant Mothers

The sociodemographic factors such as education, income, age, sex, and occupation type (Adam and Aigbokhaode, 2018). On the influence of pregnant women's age and their decision to give birth at a health facility, a bivariate analysis from two studies indicated that women aged 25 years and above were more likely than younger women to deliver in a formal health institution. However, with multivariate analysis, age was an inconsistent predictor for health facility delivery (Dahiru and Oche, 2015 and Ononokpono, and Odimegwu, 2014). Furthermore, in a study to review a woman's education status as a determinant of maternal health care use in Nigeria, Fawole and Adeoye (2015) found that women with secondary or tertiary education were significantly more likely to use hospitals than those with primary education or no formal education. Because husbands play a part in decision-making, their level of expertise is taken into account. As with a woman's education, Dahiru and Oche (2015) found that 67% of women whose husbands had a secondary level education had received at least four ANC visits, compared to 23% of women whose husbands had no formal education. The partner's education plays a similar role regarding the use of health facilities for delivery.

Obstetric variables which include parity, number of children, use of Antenatal Care (ANC), among others plays significant roles in expectant mothers' choice of delivery service. According to findings, there is a statistically significant link between not using hospital delivery services and having five or more children. The same significant link exists between not having a hospital delivery and having five or more children (Rosário, Gomes, Brito and Costa, 2019). One of the frequently asked obstetric questions to pregnant women is about their use of ANC during their previous pregnancy, a continuum of care from pregnancy through delivery. Women who use ANC services in approved health facilities are more likely to give birth there, as expected. This finding is consistent with the observation by Dahiru and Oche (2015) that 56% of women who had a minimum of four ANC visits had their deliveries in a health facility compared with 40% of women who had fewer than four ANC visits and delivered in a health facility.

Health service factors influences expectant mothers choice of delivery service. According to Meme (2002), distance to health facilities could be a barrier for pregnant women choosing to deliver in a health institution. According to Magadi (2000), road networks can sometimes make access to a health centre impossible. Others include cost of service (Idris et al., 2013), quality of care (Chukwuma, Wosu, Mbachu, and Weze, 2017), and type of health facility Wong et al. (2018).

Benefits of utilizing modern health facility for delivery

Utilizing facility-based delivery services is one of the most effective and tested treatments to lower maternal fatalities. It helps ensure a safe delivery and reduces both existing and conceivable difficulties that can result in maternal mortality. Utilizing skilled birth attendants (SBAs), emergency obstetric and newborn care (EmONC), antenatal care (ANC), postnatal care (PNC), and other services improves maternal and neonatal health and lowers death rates in underdeveloped nations (Yaya, Bishwajit, Uthman, and Amouzou, 2018). According to Press (2017), if all women had access to therapies for preventing or treating pregnancy- and birth-related problems, at least 75 percent of maternal deaths could be avoided. However, there is little research on the factors that influence women in Kogi State's Ankpa Local Government Area in choosing where to give birth.

Consequences of not Utilizing Modern Health Facility for Delivery

Each year, millions of pregnant women and newborns in underdeveloped nations pass away or suffer grave health issues related to pregnancy and childbirth. Maternal mortality rates in the majority of Sub-Saharan African nations range from 600 to 999 per 100,000 live births, making it challenging to evaluate precisely in areas with limited resources (Letamo and Rakgoasi, 2003). Home delivery is typically the least expensive alternative in settings with limited resources, but it comes with associated risks of infection and a lack of equipment should issues arise (Thind, Mohani, Banerjee, and Hagigi, 2008). Many women in impoverished nations, particularly in sub-Saharan nations, do not have the good fortune to have medical professionals care to

them during labour. This understaffing could be viewed as one of the main causes of maternal and newborn mortality (WHO, 2005). Nigeria's high maternal death rate has persisted, with significant regional variation (Olatunji and Sule-Odu, 2001). Despite this, home deliveries are common among women of childbearing age, and the use of reproductive health care is still low (Babalola and Fatusi, 2009). As a result, maternal morbidity and mortality continue to be a public health issue. Numerous variables, such as demographic, socioeconomic, cultural, obstetric, and health system variables, may have an impact on this (Khalid, Daniel, and Lale, 2006).

Theoretical Framework

Two theoretical frameworks guide this study; Health Belief Model (HBM) which was modified by Becker and Maiman (1977), and Theory of Autonomy by Anderson (2013). Because of the contributions they provided regarding what would influence an individual to use health care services, these two theories were deemed to be substantial and appropriate to this study.

RESEARCH METHODS

Research Design

The study shall utilize the survey which will generally enable the answering of the research questions, being based, as it were, on the empirical data generated from the field. This descriptive and analytical framework is deemed suitable for the study's data set, its statistical manipulation, presentation and inference drawing from the sampled population of expectant mothers in Ankpa LGA.

Study Setting

Ankpa is located in the NW quadrant of Ankpa sheet 269 on a scale of 1:25,000. The study area covers a land area of about 30km², from longitude 7° 36'E to 7° 39' E and latitude 07° 23' N to 07° 26' N. Ankpa lies on a gently undulating plateau bisected by the river Maboro also called Anambra river which drains most of the area. Ankpa is located in the eastern part of Kogi State. Ankpa Local Government Area has one general hospital located along Ojede road sharing boundary with Jema'atul Nasril Islamiyya Secondary School, delivery homes at different locations, prayer houses that aid expectant mothers, and many other private hospitals such as Bethel hospital, Mother and Child, among others.

Ankpa Local Government is politically divided into three (3) districts namely; Ankpa district, Enjema district and Ojoku district. Also, Ankpa local government consist of thirteen (13) political wards, namely; Ankpa township ward, Ankpa ward I, Ankpa ward II, Suburb I and Suburb II, all in Ankpa district. Ojoku, Ojoku II, Ojoku III and Ojoku IV, all in Ojoku district. EnjemaI, Enjema II, Enjema III and Enjema IV, all in Enjema district. The breakdown shows that Ankpa district consist five (5) political wards, Ojoku district has four (4) political wards, while Enjema district also has four (4) political wards. The LGA is divided into two (2) state constituencies, namely; Ankpa I state constituency, and Ankpa II state constituency. Ankpa I state constituency comprises of five (5) political wards of Ankpa district, while Ankpa II constituency comprises eight (8) political wards of Ojoku and Enjema districts.

Socioeconomic activities in Ankpa include; farming, banking and finance, trade, transportation businesses, whole sales and ware housing.

Study Population

The study population will be women of reproductive age (15-49 years) that uses either hospitals, prayer houses or local delivery homes in Ankpa Local Government Area of Kogi State, Nigeria. This population group varies in proportion from one location to another depending on the setting and other considerations. Moreover, the population shall include registered expectant mothers in the study area which total two thousand, three hundred and ninety eight (2,398). See table 1 below for the list of health facilities and traditional homes used for the study.

Sample Size

The sample size for the study was drawn from the total population of expectant mothers in the study area using Krejcie and Morgan formula which total 329..

Research Instrument

The instrument to be used for the study will be a structured questionnaire "Expectant Mothers Choice of Delivery Services Questionnaire (EMCDSQ)". The questionnaire is divided into three sections; the first section cover letter soliciting their voluntary participation, the second section contain questions requesting expectant mothers' socio-demographic characteristics and the third section answer the research questions of the study. The questionnaire is close ended where participants are provided with options to choose a response from. This is ideal for this study because it gives a higher response rates when respondents don't have to write so much.

Methods of Data Analysis

Responses from the retrieved questionnaire were coded and analyzed using Statistical Package for Social Sciences (SPSS) version 20. Frequency count and percentage was used to represent the demographic variables.

DATA PRESENTATION AND ANALYSIS

Socio Demographic Characteristics of Respondents

Table 1: Socio demographic characteristics of respondents

Variables	Category	Frequency (N=329)	Percentage (%)
Place of residence	Ankpa district	147	44.7
	Enjema district	127	38.6
	Otoku district	55	16.7
Name of health facility used during child birth	Prayer house	30	9.1
	Home delivering/Traditional BA	32	9.7
	Government Hospitals	56	17.0
	Private Hospitals	88	26.7
	Maternity homes	123	37.4
Age	15-20	70	21.3
	21-25	81	24.6
	26-30	158	48.0
	36-40	10	3.0
	>41	10	3.0
Religion	Islam	180	54.7
	Christianity	139	42.2
	Traditionalist	8	2.4
	Free Thinker	2	.6
Marital status	Married	329	100.0
Nature of family	Monogamy	199	60.5
	Polygamy	130	39.5
Educational level	No formal education	50	15.2
	Primary	20	6.1
	Secondary	140	42.6
Number of kids birth	Tertiary	119	36.2
	0	60	18.2
	1	70	21.3
	2	50	15.2
	3	60	18.2
	4	60	18.2
Occupation	>5	29	8.8
	House wife	70	21.3
	Farming	30	9.1
	Trading	170	51.7
	Schooling	20	6.1
Level of income per month	Civil servant	39	11.9
	No income	70	21.3
	<20000	169	51.4
	20000-40000	80	24.3
	>41000	10	3.0

Choice of place of delivery services among the expectant mothers

Research question 1: Where is the choice of place of delivery services among the expectant mothers in Ankpa Local Government Area of Kogi State?

Table 2: Percentage on choice of place of delivery services among the expectant mothers

S/N	Item	Response				
		SA	A	N	D	SD
		5	4	0	2	1
1.	Expectant mothers prefer delivering in government owned hospitals	49 (14.9%)	7 (2.1%)	6 (1.8%)	116 (35.3%)	151 (45.9%)
2.	Expectant mothers prefer delivering in private hospital	58 (17.6%)	30 (9.1%)	0 (0.0%)	112 (34.0%)	129 (39.2%)
3.	Expectant mothers prefer delivering in maternity homes	119 (36.2%)	178 (54.1%)	0 (0.0%)	2 (0.6%)	30 (9.1%)
4.	Expectant mothers prefer delivering at home/TBA	92 (28.0%)	31 (9.4%)	0 (0.0%)	97 (29.5%)	109 (33.1%)
5.	Expectant mothers prefer delivering in prayer houses	30 (9.1%)	0 (0.0%)	0 (0.0%)	171 (52.0%)	128 (38.9%)

Source: Field Survey (2023)

Factors of choice of delivery services among expectant mothers

Research question 2: What are the determining factors of choice of delivery services among expectant mothers in Ankpa Local Government Area of Kogi State?

Table 3: Percentage on factors of choice of delivery services among expectant mothers

SN	Item	Response				
		SA	A	N	D	SD
		5	4	3	2	1
1.	Age of expectant mothers affects their decision to give birth at a health facility	158 (48%)	91 (28.0%)	9 (2.7%)	91 (27.9%)	79 (24.3%)
2.	Cultural religious belief is inclined to expectant mothers choice of delivery services	72 (22.0%)	37 (11.3%)	9 (2.7%)	123 (37.8%)	108 (33.0%)
3.	The number of times expectant mothers have given birth influences their choice of delivery service	148 (44.8%)	91 (27.9%)	9 (2.7%)	41 (12.5%)	45 (13.7%)
4.	Expectant mothers place of ancestral deities affects choice of delivery service	181 (54.8%)	35 (10.7%)	9 (2.7%)	22 (6.7%)	35 (10.6%)
5.	Cost of service (if any) of private mothers choice of delivery service	43 (13.1%)	71 (21.6%)	9 (2.7%)	109 (33.1%)	96 (29.2%)
6.	The type of health facility (public, private or traditional) affects expectant mothers choice of delivery service	91 (27.7%)	109 (32.8%)	9 (2.7%)	31 (9.4%)	38 (11.5%)
7.	Educational level of expectant mother influences her choice of delivery	31 (9.3%)	31 (9.3%)	9 (2.7%)	127 (38.6%)	100 (30.3%)

Source: Field Survey (2023)

Benefits of choosing the modern health delivery services among expectant mothers

Research question 3: What are the benefits of choosing the modern health delivery services among expectant mothers in Ankpa Local Government Area of Kogi State?

Table 4: Percentage on benefits of choosing the modern health delivery services among expectant mothers

SN	Item	Response				
		SA	A	N	D	SD
		5	4	3	2	1
1.	It lowers economic (death) rate	122 (37.1%)	109 (32.8%)	9 (2.7%)	24 (7.3%)	76 (23.1%)
2.	It improves maternal and neonatal health	194 (59.8%)	78 (23.7%)	9 (2.7%)	34 (10.4%)	27 (8.2%)
3.	It prevents complications during birth	150 (45.8%)	133 (40.4%)	9 (2.7%)	19 (5.8%)	30 (9.2%)
4.	It is a component of health	56 (17.0%)	26 (7.8%)	9 (2.7%)	106 (32.2%)	91 (27.7%)
5.	Complications during birth are minimal in its occurrence	97 (29.5%)	106 (32.2%)	9 (2.7%)	64 (19.5%)	52 (15.8%)

Source: Field Survey (2023)

Consequences of not choosing modern health delivery services among expectant mothers

Research question 4: What are the consequences of not choosing modern health delivery services among expectant mothers in Ankpa Local Government Area of Kogi State?

Table 5: Percentage on consequences of not choosing modern health delivery services among expectant mothers

SN	Item	Response				
		SA	A	N	D	SD
		5	4	3	2	1
1.	May result to an unsafe abortion	97 (29.3%)	136 (41.3%)	9 (2.7%)	62 (18.8%)	34 (10.3%)
2.	Bleeding to death after delivery	31 (9.4%)	29 (8.8%)	9 (2.7%)	163 (49.5%)	108 (32.2%)
3.	Mother and child will be prone to infection	109 (33.0%)	111 (33.7%)	9 (2.7%)	32 (9.7%)	81 (24.6%)
4.	There is high chance of neonatal mortality	132 (40.1%)	97 (29.3%)	9 (2.7%)	41 (12.5%)	39 (11.9%)

Source: Field Survey (2023)

Discussion of Findings

This study was carried out to identify the determinants of choice of delivery services among expectant mothers in Ankpa Local Government Area (LGA) of Kogi State, Nigeria. The results present the socio-demographic characteristics of the respondents in the study area, in which 141(44.7%) of the respondents residence in Ankpa district, 127(38.6%) resides in Enjema district and 55(16.7%) of the respondents resides in Ojoku district. By inference, majority of expectant mothers resides in Ankpa district owing to the fact that it is the centre of the local government.

Findings on nature of health facility used by expectant mothers during child birth show that 30(9.1%) use prayer houses, 32(9.7%) use home delivery/traditional birth attendants, 56(17%) patronize government hospitals, 88(26.7%) use private hospitals while 123(37.4%) use maternity homes. By and large, most expectant mothers prefer to use maternity homes for delivery. It was also found that 70(21.3%) of the respondents fall between age

bracket 15-20, 81(24.6%) fall within 21-25, 158(48.0%) are within 26-30, 10(3.0%) are within age 31-40 while 10(3.0%) are 41 and above. This is an indication that most expectant mothers are within the age bracket of 26-30 years.

The religious distribution of respondents show that 180(54.7%) practice Islam, 139(42.2%) practice Christianity, 8(2.4%) practice traditional religion while 2(0.6%) are free thinkers. Muslims who practice Islam form the major population of expectant mothers in the study area. Similarly, findings on the marital status of expectant mothers shows that 329(100%) are married. It is an indication that having children outside wedlock is not common in the study area. The nature of family in which expectant mothers come from show that 199(60.5%) are from a monogamous family while 130(39.5%) are from polygamous family. This shows that most expectant mothers come from a monogamous family.

The educational level of expectant mothers as found from the findings indicates that 50(15.2%) have no formal education, 20(6.1%) have primary school certificate, 140(42.6%) have secondary school certificate while 119(36.2%) have higher education. By implication, majority of the expectants mothers in the study area have education up to secondary school level. It was also found that 70(21.3%) of the expectant mothers are house wife, 30(9.1) are into farming as a profession, 170(51.7%) are traders, 20(6.1%) are still schooling while 39(11.9%) are civil servants. By indication, most expectant mothers in the study area are into trading (buying and selling) as an occupation thereby having their own earnings. On level of income per month of the respondents, it was found that 70(21.2%) have no income, 169(51.4%) earn below 20,000, 80(24.3%) earn between 20,000-40,000 while 10(3.0%) earn above 41,000. Majority of the expectant mothers earn 20,000 averagely per month.

From the results of the study, it was discovered that expectant mothers (90.2%) in the study area do not patronise government owned hospitals rather; they prefer to use other better alternatives available to them. Expectant mothers do not patronise government owned hospitals because of the insensitive nature of the midwifery's working in the labour room; their negligence is next to none. Also, it was found that majority of expectant mothers do not prefer using private hospitals for delivery. Private hospitals because of their exorbitant service charges, most women prefer to use other available delivery services. They patronize private hospitals only on referrals. This is in tandem with the work of Wong et al. (2018) who based on the assumption stated that private health facilities are more expensive than public ones with identical levels of service.

Findings also show that expectant mothers' prefer using maternity homes for delivery. From the data collected, 90.3% of the respondents patronize maternity homes in the study area. This assertion is supported with the fact that maternity homes provide a special kind of services which take care of both the infant and mothers wellbeing. Also, their services are most often free or cheap that a low income earner can afford. This finding agrees with Love, Titilayo and Sunday (2020) who stated that some participants attributed past unpleasant experiences or fear of such experiences at the hands of health providers in health facility to use of non-institutions or other modern delivery services for birth. It was also found that most expectant mothers frown at home delivery, this is because, the risks involved with home delivery are beyond measures, emergencies or complications can't be easily handled and it endangers both the baby and mothers' life. The hygiene level is poor and as such, infection can be transmitted to both mother and the child. This is why Abera, Bukola and Ayodele, (2016) stated that two-thirds of maternal deaths are thought to be caused by complications around childbirth that were not predictable during pregnancy, with home delivery being the single most significant contributing factor. Finally, it was found that expectant mothers do not choose prayer houses/ homes for delivery. In this century, no expectant mother considering their level of exposure in the study area will be that daft to choose prayer houses for delivery because medicine and technology have advanced in areas of child delivery. One can not dispute the fact that some expectant mothers patronises prayer houses but they do not neglect using other delivery services available to them.

The second objective identified the determining factors influencing expectant mothers' choice of delivery services. The results from this study shows that 72.6% of the respondents agree to age being a factor that influences expectant mothers' choice place of delivery. Since most expectant mothers in the study area are young (26-30years), they will prefer using modern delivery facilities because they lack delivery experience thus needing the assistance of professional midwifery's. Their fear of complications and exposure are also a playing factor. This is in tandem with the findings of Egharevba, Pharr, van Wyk and Ezeanolue (2017) who stated that those who were less than 20 years had lower odds of delivering in the hospital in comparison with those who were between 20-29 years, but this was not a significant association. While the link between age and institutional delivery among pregnant women may not be statistically significant, it is nevertheless an important sociodemographic covariate to consider. Similarly, Gabrysch and Campbell (2009) stated that the older the mother gets, the less likely she is to give birth in a health facility.

Similarly on cultural/ religious belief as factor influencing expectant mothers' choice of place of delivery, findings shows that 82.4% of the expectant mothers disagreed to culture/ religion as factor influencing expectant mothers' choice of place of delivery in the study area. Due to education, science, technology and social media handles, culture/ religion plays little or no impact on expectant women choice of place of delivery, it is now a global village where everyone can get enlightened at the comfort of their homes. This is contrary to the findings of Muhammed and Tepanata (2018) who ascribed culture/religion as factor found to be significantly associated with choice of birth centre by pregnant women.

The number of time expectant mothers have given birth influences their choice of place of delivery. This is evident as 73.9% of the respondents agreed to it. This is in line with the work of Dahiru and Oche (2015) who stated that a similar pattern exists in the association between parity of women and institutional delivery. A lady with a parity of two to four is more likely to give birth in a hospital. Other researchers discovered that women with a parity of five or more were less likely to deliver in a health facility than women with one to two live babies (Alfred et al., 2017; Ononokpono and Odimegwu, 2014). These findings reveal that a woman's pregnancy, delivery, and interaction with the social and health-care systems milieu can all influence her behaviour throughout subsequent pregnancies.

From the result also, the place of antenatal most often influence expectant mothers' choice of delivery service. As shown on the table, 73.5% of the respondents agreed to this. Most expectant mothers in this environ attend two or more antenatal delivery centres. Some combine modern delivery services with prayer houses, others combine two modern delivery services among others. In all, they get to deliver in either of the delivery facility they have once

visited. This finding is consistent with the observation by Dahiru and Oche (2015) that 56% of women who had a minimum of four ANC visits had their deliveries in a health facility compared with 40% of women who had fewer than four ANC visits and delivered in a health facility. Even if a woman had at least one ANC visit during her pregnancy, whether in a public or private institution, she was more likely to have child delivered there.

On whether the cost of service influence expectant mothers' choice of delivery service, finding shows that cost does not influence expectant mothers' choice of delivery service. Private delivery service providers charge exorbitantly for delivery services rendered to expectant mothers, most time, they operate an expectant mother during delivery only to increase their earning which is not common with other delivery outlets. This is why many only patronise private delivery centres only when the demand arises. Their cost doesn't stop expectant mothers to utilize their services when the need arises. This finding is in line with the work of Yaya, Bishwajit, Uthman, and Amouzou, (2018) who stated that if the cost of services is regarded high, a pregnant woman's chances of giving birth outside of that health institution is high. Though, in this case, the private delivery services are still patronised but only on referral or rare cases.

From the table also, it is concluded that the type of health facility influence expectant mothers' choice of delivery service. Preference exists among expectant mothers as to which health facility they use. As evident from the initial findings, most expectant mothers prefer using maternity homes and detest government delivery centres and private delivery services because of their negligence and cost of services respectively. This is in line with the findings of Chukwuma, et al., (2017) who asserted that if the client has previously indicated happiness with care obtained from the same health facility, then the use of ANC and the location of delivery are both substantially associated with service satisfaction.

Lastly, educational level or attainment is not a playing factor in choosing a delivery service by expectant mothers. The world have become a global village, one need no education to know what delivery service to choose because either the expectant mother, her neighbour, a family member, a well-wisher among others have the experience and enlightenment on child delivery and management of pregnancy have gotten to its peak in the study area. This is contrary to the work of Fawole and Adeoye (2015) found that women with secondary or tertiary education were significantly more likely to use hospitals than those with primary education or no formal education.

The third objective identified the benefits of choosing modern health delivery services among expectant mothers in the study area. It was found that choosing a modern health delivery services lowers neonatal death rates. This is in collaboration with the work of Press (2017) who stated that if all women had access to therapies for preventing or treating pregnancy- and birth-related problems, at least 75 percent of maternal deaths could be avoided. Also, expectant mothers are aware and agree to the fact that choosing a modern delivery services equate to a great extent of having maternal and neonatal improved health. This is not far from the assertion of Macro, (2013) who stated that increasing the percentage of births that take place in hospitals is an essential method for lowering maternal mortality and maintaining child and mothers' health.

Further more, findings also shows that choosing a modern delivery services by expectant mothers do not guarantee that complications may not arise during and after child birth. Modern delivery services have the expertise to handle complications whereas, other none modern delivery services employ crude methods to handle complications arising from delivery. This finding agrees with the findings of Rothman, (2014) who said that every pregnancy has its associated risks irrespective of the delivery service utilized. Also, a large percentage of 81.1% of the respondents refuted that modern delivery services are not cheap and affordable. This is because expectant mothers claim to pay exorbitantly on drugs, test, scanning among others which are cheap elsewhere offering the same services. This is in line with the findings of Idris et al., (2013) who in a study observed that all the women in a study population made at least one ANC visit because of the free maternal and child health and vis- versa if it is expensive. Lastly, findings show that expectant mothers are given appropriate attention if complications arise during birth in modern delivery services. On a contrary, it is true that one will get the best from patronising modern delivery services as complications can be handled by professionals but most times, the health and life of the mother and child are put to risk during complication due to labour room attendant's lackadaisical attitude. It is most common in government owned hospitals. Conditions are left until it become severe before they attend to. This is in tandem with the works of Chukwuma, et al., (2017) who stated that service satisfaction play a great role in influencing expectant mothers choice of delivery service.

The last objective identifies the consequences of not choosing modern health delivery services among expectant mothers. On whether it may result to an unsafe abortion for not choosing modern health delivery services, it was found that not using modern delivery services may result to an unsafe abortion. Miscarriages happen when a pregnant mother does not get the necessary antenatal care from modern delivery services. Not only that; handling miscarriage need a specialised kind of care which can only be provided in modern delivery services. This finding is in alignment with Cameron, Suarez, and Cornwell, (2019) who state that not using a modern delivery services can cause unsafe abortion. Also, it was found that not using a modern delivery service does not equate to bleeding to death after delivery. Bleeding after delivery is not proportionate to the choice of delivery services one uses for delivery but managing it has a serious relationship with the type of delivery service you use. Modern delivery service will give a better attention than the traditional homes or prayer houses. This is contrary to the findings of Cameron, Suarez, and Cornwell, (2019) who stated that Bleeding, infection, unsafe abortions, obstructed labor, and hypertensive disorders are direct obstetric causes of maternal mortality which result from none usage of modern delivery services.

Results also show that mother and child will be prone to infection diseases if they do not utilize modern delivery services. This is in line with the works of Thind, Mohani, Banerjee, and Hagigi, (2008) who asserted that home delivery is typically the least expensive alternative in settings with limited resources, but it comes with associated risks of infection and a lack of equipment should issues arise. Lastly, it was found that not utilizing modern delivery services translate proportionately to having a high chance of neonatal mortality. This is not different from the finding of WHO, (2005) who stated that not utilizing modern delivery facility is the main causes of maternal and newborn mortality

Conclusion

Pregnancy and childbirth are the two socially desirable physio-biological activities meant for the prime purpose of human procreation and continuity. Delivery services are avenues for ensuring successful births among expectant mothers. Both traditional and modern types exist. They include government owned hospitals, private hospitals, maternity clinics/homes, prayer houses among others. The choice of either of these two categories (traditional or modern) is a function of a variety of factors such as age, number of time expectant mothers have given birth, place of antenatal and type of health facility. Culture/religion, cost of service and educational level does not influence expectant mothers choice of delivery service.

To limit or avoid lost of mother and child, using modern health facility is most advisable. Choosing a modern health delivery services lowers neonatal death rates, improving maternal and neonatal health, expectant mothers are given appropriate attention if complications arise during birth in modern delivery services. From the foregoing, the followings are recommended.

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